

Case 3155

MACROTERMITINAE Kemner, 1934 (Insecta, Isoptera): proposed precedence over ACANTHOTERMITINAE Sjöstedt, 1926

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Abstract. The purpose of this application is to conserve the usage of the family-group name MACROTERMITINAE Kemner, 1934 for a well known and important group of fungus-growing termites. The senior subfamily name ACANTHOTERMITINAE Sjöstedt, 1926 (type genus *Acanthotermes* Sjöstedt, 1900) has been used only once since its establishment 75 years ago, and then for a tribe within MACROTERMITINAE not including *Macrotermes*. The junior name MACROTERMITINAE (type genus *Macrotermes* Holmgren, 1909) has been used universally for this group of termites. It is proposed that the family-group name MACROTERMITINAE be given precedence over ACANTHOTERMITINAE.

Keywords. Nomenclature; taxonomy; Isoptera; TERMITIDAE; MACROTERMITINAE; ACANTHOTERMITINAE; *Macrotermes*; *Acanthotermes*; termites.

1. Sjöstedt (1900a, p. 278) established the nominal genus *Acanthotermes* in a short sentence appended to the description of some African termites. This paper was published on 23 January 1900, although it bears the date 1899; he included three species, *Termes spiniger* Sjöstedt, 1900, *T. militaris* Hagen, 1858 and *T. acanthothorax* Sjöstedt, 1898 (p. 204). In a paper published on 11 April 1900 Sjöstedt (1900b, p. 54) provided a complete description of *Acanthotermes*. Twenty-six years later he (Sjöstedt, 1926, p. 60) designated *Termes acanthothorax* as the type species and in the same paper (pp. 8, 60) established the name ACANTHOTERMITINAE based on his genus *Acanthotermes*, as a subfamily of TERMITIDAE Latreille, 1802.

2. In a general work on the systematics of termites Holmgren (1909, p. 193) established the nominal genus *Macrotermes* as a subgenus of *Termes* Linnaeus, 1758 to accommodate the ‘*lilljeborgii*[sic] gruppe’ of species. The name *Macrotermes* is available by indication (Article 12.2.5 of the Code); no type species was explicitly designated but is taken to be *Termes lilljeborgi* Sjöstedt, 1896 (p. 269) by monotypy since *T. lilljeborgi* is an available specific name that can be unambiguously assigned to a nominal species-group taxon and no other nominal species was cited in conjunction with *Macrotermes*. Kemner (1934, p. 69) established the subfamily name MACROTERMITINAE, also within TERMITIDAE, based on *Macrotermes* Holmgren.

3. Hare (1937, pp. 461–462, pl. IIIa), in a phylogenetic study of the termites based on the mandibular morphology of the soldier caste, brought *Acanthotermes* and *Macrotermes*, along with four other fungus-growing genera, into a single subfamily for which she used Kemner's name MACROTERMITINAE; she made no reference to the senior name ACANTHOTERMITINAE.

4. Snyder (1949, p. 202), in a general taxonomic catalog of termites, used MACROTERMITINAE and listed ACANTHOTERMITINAE as a synonym. He cited the dates of both names but ignored the seniority of ACANTHOTERMITINAE; the Principle of Priority was in fact not extended to family-group names until the 1961 edition of the Code.

5. Weidner (1956, pp. 66–67), without altering the included genera of the subfamily, recognized three tribes and used the name ACANTHOTERMITINI for one which did not include the genus *Macrotermes*. No author between Sjöstedt (1926) and Weidner (1956), nor any author since Weidner, has used a family-group name based on *Acanthotermes*. After the phylogenetic study by Hare (1937) and since the taxonomic catalogue by Snyder (1949), the name MACROTERMITINAE has been applied ubiquitously to *Macrotermes*, *Acanthotermes* and their relatives. All major treatments of termites in the last 50 years have used the name MACROTERMITINAE to refer to the group of fungus-growing termites related to *Macrotermes* and *Acanthotermes* (e.g., Bouillon, 1970; Chhotani, 1997; Krishna, 1969, 1970; Pearce, 1997; Ruelle, 1970; Sands, 1998; Tho, 1992; Weidner, 1970). The macrotermitine termites are important pests and significant recyclers in African and Asian ecosystems. A voluminous biological literature exists under the name MACROTERMITINAE (e.g., Darlington, 1991; Eggleton et al., 1995; Emerson, 1955; Grassé, 1949, 1986; Grassé & Noirot, 1951; Harris, 1961; Johnson, Thomas, Wood & Swift, 1981; Noirot, 1970; Pearce, 1997; Roonwal, 1970; Sieber & Leuthold, 1981; Thakur, 1981; Weidner & Riou, 1986; Wood, Bednarzik & Aden, 1987).

6. To use the name ACANTHOTERMITINAE in place of its junior synonym MACROTERMITINAE would bring about a change in name for a commonly encountered and important group of termites that are universally referred to in biological and taxonomic studies under the junior synonym. We are presently completing a new taxonomic catalogue of all living and fossil termites and propose that family-group names based on *Macrotermes* be given precedence over those based on *Acanthotermes* in the interest of stability. The family-group name based on *Acanthotermes* would remain available for any entomologist who may in the future consider the two genera involved to belong to different family-group taxa.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule that the family-group name MACROTERMITINAE Kemner, 1934 and other family-group names based on *Macrotermes* Holmgren, 1909 are to be given precedence over ACANTHOTERMITINAE Sjöstedt, 1926 and other family-group names based on *Acanthotermes* Sjöstedt, 1900 whenever their type genera are placed in the same family-group taxon;
- (2) to place on the Official List of Generic Names in Zoology the following names:
 - (a) *Macrotermes* Holmgren, 1909 (gender: masculine), type species by monotypy *Termes lilljeborgi* Sjöstedt, 1896;
 - (b) *Acanthotermes* Sjöstedt, 1900 (gender: masculine), type species by subsequent designation by Sjöstedt (1926) *Termes acanthothorax* Sjöstedt, 1898;

- (3) to place on the Official List of Specific Names in Zoology the following names:
 - (a) *lilljeborgi* Sjöstedt, 1896, as published in the binomen *Termites lilljeborgi* (specific name of the type species of *Macrotermes* Holmgren, 1909);
 - (b) *acanthothorax* Sjöstedt, 1898, as published in the binomen *Termites acanthothorax* (specific name of the type species of *Acanthotermes* Sjöstedt, 1900);
- (4) to place on the Official List of Family-Group Names in Zoology the following names:
 - (a) MACROTERMITINAE Kemner, 1934 (type genus *Macrotermes* Holmgren, 1909), with the endorsement that it and other family-group names based on *Macrotermes* are to be given precedence over ACANTHOTERMITINAE Sjöstedt, 1926 and other family-group names based on *Acanthotermes* Sjöstedt, 1900 whenever their type genera are placed in the same family-group taxon;
 - (b) ACANTHOTERMITINAE Sjöstedt, 1926 (type genus *Acanthotermes* Sjöstedt, 1900), with the endorsement that it and other family-group names based on *Acanthotermes* are not to be given priority over MACROTERMITINAE Kemner, 1934 and other family-group names based on *Macrotermes* Holmgren, 1909 whenever their type genera are placed in the same family-group taxon.

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